

C L A I M S

1. Process for the production of an acoustical attenuating panel comprising a cellular structure (2) covered on one side with a reflector (3) and on the other side with an acoustically resistive layer (1, 1', 1'') with two components
5 respectively with an acoustical property and with a structural property, characterized in that it consists:

- Q
G
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B
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D
C
P
A
D
E
P
A
10 - in emplacing on a mold (M) of a shape appropriate to the panel to be obtained, a layer (1a, 1'a, 13, 15) with structural properties, constituted by filaments pre-impregnated with a thermoplastic or thermosetting resin, by draping, winding or wrapping, such that said layer has a quantity of open surface of the order of 30% of the total surface of the exposed layer,
- 15 - in emplacing from above the layer with structural properties, a layer (1b, 1'b, 1''b) with acoustical properties, constituted by a microporous cloth of a thickness of the order of a tenth of that of the layer with structural properties,
- 20 - then emplacing the cellular structure (2) and the reflector (3) with if desired the addition of an adhesive (5, 6, 10) between the components,

- at least one step of baking in an autoclave being carried out at the end of at least one of the above steps of emplacement

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2. Process according to claim 1, characterized in that there is given to said layer (1'a) with structural properties the necessary porosity by the spacing of the filaments (7, 8) of the weaving or of the winding or of the wrapping of the filaments.

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3. Process according to claim 1, characterized in that there is given to said layer (1a) with structural properties the necessary porosity by piercing said layer after baking in an autoclave, the layer (1b) with acoustical properties being thereafter emplaced.

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4. Process according to claims 1 and 2, characterized in that the layers (1'a) with structural properties and (1'b) with acoustical properties are assembled with the possible interposition of a cross-linking adhesive (5) and subjected to baking in an autoclave, then the assembly is assembled with the structure (2) with a cellular core and with the reflector (3), with if desired the interposition of a cross-linking

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adhesive (6), and subjected to a new baking in an
10 autoclave.

5. Process according to one of claims 1 to 4,
characterized in that the layer with structural
properties is constituted by several layers (13 to 16) of
crossed filaments, the layers being on opposite sides of
5 the layer (1'b) with acoustical properties.

6. Process according to claim 3, characterized in
that the pierced holes (4) of the layer (1a) with
structural properties have a diameter greater than the
thickness of said layer and their external opening (11)
5 is flared.

7. Panel made according to any one of claims 1 to
6.